

REMARKS

This paper responds to the Office Action dated June 13, 2005.

Improper imposition of finality in the rejection. It is noted that on June 1, 2005, this application was transferred from Examiner Edward K. Park to Examiner Stefan Stoykov. It is further noted that Examiner Park is no longer listed in the USPTO Employee Locator.

Examiner Stoykov has performed more searching and has uncovered a reference US Pat. No. 5,136,715 to Hirose et al. ("Hirose"). Hirose was not cited by Examiner Park in either of the two previous Office Actions. ***It is requested that the finality of the rejection be withdrawn in view of this new citation of a reference which, it appears to the undersigned, ought to have been cited in the first Office Action, but was not.***

Argument. Claim 6 is reproduced here for convenient reference:

A method for use with a system comprising first and second servers communicatively coupled over a fibre channel arbitrated loop (FC-AL) communications channel, each server comprising an FC-AL interface coupled to the FC-AL communications channel, and arranged to receive a frame containing an indicator of a reset command for a server including a processor associated with said resetting apparatus; and a reset controller, responsive to said reset command, to issue a reset interrupt command for resetting said processor; the method comprising the steps of:

at the first server, sending a frame over the FC-AL communications channel containing an indicator of a reset command ***addressed to the second server,***

at the second server, receiving within a reset controller external to and distinct from the processor of the second server, the frame over the FC-AL communications channel containing the indicator of the reset command ***addressed to the second server,***

at the second server, in response to the receipt of the frame containing the indicator of the reset command, issuing a hardware reset interrupt command from the reset controller to the processor of the second server;

whereby the processor *of the second server* is reset by means of the hardware reset interrupt command.

The Examiner admits that numerous limitations in the claim are missing from Hirose. These include:

- “Hirose does no[t] specifically state a server.” (Office action page 3.)
- “Hirose does not specifically state [a] reset interrupt command.” (Office action page 3.)
- “Hirose does not specifically state [a] first and second server.” (Office action page 4.)

The Examiner further relies, in reaching the rejection, on a number of assumptions which are not known to the undersigned to be true. These include:

- the view that “it is well known in the art that the above-mentioned components/units, interconnections, and functionality (all or in combination) are functional units in a server, thus Hirose discloses a server.” (Office action page 3.)
- the view that “it is well known in the art that reset interrupt commands are applied to a reset terminal of a processor.” (Office action page 3.)
- the view that “it would have been obvious to one of the ordinary skill in the art at the time of invention to use the FC-AL interface for the resetting apparatus disclosed by Hirose.” (Office action page 4.)

Applicant's attorney disagrees with these three views, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges these views and asks whether the Examiner can show support for these views.

“Point-to-point” versus “loop.” The Examiner states that “Hirose further discloses a system comprising first and second servers coupled communicatively over a fibre channel arbitrat[ed] loop (FC-AL),” stating that this limitation is found in Hirose at column 3, lines 64-66, and in Figure 3. The undersigned has, however, diligently studied the cited portions of Hirose and is unable to find any hint or suggestion of a fibre channel arbitrated

loop at the cited portions. Indeed the undersigned has diligently studied the entirety of Hirose, among other things performing a text search of Hirose, and cannot find a fibre channel arbitrated loop anywhere in Hirose, let alone such a loop coupling first and second servers.

This problem in the Examiner's rejection is not a negligible problem. The system of Hirose, as best understood by the undersigned, has no loops at all, but instead has only point-to-point links. See Fig. 3 in which a line 1 is apparently one end of a point-to-point link, Fig. 4 in which a line 1 is apparently one end of a point-to-point link, and Fig. 5 in which a line 60 is apparently one end of a point-to-point link. Fig. 6 shows a well-known HDLC frame including an "A" (address) portion but nowhere in Hirose is there any teaching to actually use the "A" portion, and indeed it appears to the undersigned that Hirose makes no use of the "A" portion. For example no address decoding is mentioned anywhere in the specification (so far as the undersigned can discern) nor does any address decoder appear in Figs. 3, 4 or 5. Nor do the flowcharts of Figs. 7, 8 or 9 show any step of checking for an address match or any step of taking any further step in the event of a failure to achieve an address match.

But of course this (the absence of any address checking or decoding) is exactly what would be expected in a system composed of point-to-point links. Any message passed on a point-to-point link is, by definition, intended for the other end of the link, and thus no addressing is needed. (In most HDLC links, for example ordinary T1 data lines, the addressing is either ignored unused or is used at most for some sort of data direction within the device at the receiving end of the link.

As is well known to one skilled in the art, a crucial aspect of any loop (as distinguished from a point-to-point link) is that there must be an addressing mechanism so that any device on the loop can determine whether it (the device itself) matches the address in a message, or whether it does not match (in which case the message is passed along further down the loop toward the addressed device).

Not once, not twice, but three places in claim 6 there is a limitation regarding the addressing of a frame to a particular server on the loop. Yet so far as the undersigned can discern, there is no teaching or suggestion of such addressing in Hirose.

Indeed it appears to the undersigned that Hirose, by teaching the use of apparatus that (apparently) always performs its reset function regardless of any addressing, actively teaches away from the claimed invention. In particular, it appears that if the approach of Hirose were actually put to use in an FC-AL system, the unhappy result would be that any single transmission of a reset command would result in *every single device in the loop getting reset!* This would lead to disarray and havoc in the system.

The Examiner is urged to recall why these resets are taught in the claimed invention. The assumption is that there are at least two devices in an FC-AL loop, and that one of the devices has reached the conclusion that a second one of the devices has malfunctioned and needs to be reset. The device that has not malfunctioned (the first device) will address a specific reset command to the second device, resetting it. But if the approach of Hirose were employed, it seems that all devices in the loop, including the one that had not malfunctioned, would get reset. Importantly, any device emitting a reset command would apparently *reset itself* as the message propagated around the loop back to where it began.

Hirose, although superficially seeming to be pertinent prior art, is instead non-analogous art and would not, it is submitted, be employed by one skilled in the art to attempt to solve the problems to which the present invention is directed.

For this reason, in addition to the reasons discussed above, it is suggested that claim 6 be allowed in view of Hirose.

Claim 5 has been amended slightly to make clear that addressing is used, and should be allowed for the same reasons as claim 6.

Reconsideration is requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Carl Oppedahl".

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